

SEQUENCE LISTING

<110> Case, Casey C.
Zhang, Lei
Sangamo Biosciences, Inc.

<120> Functional Genomics Using Zinc Finger Proteins

<130> 019496-002000US

<140> 09/395,448

<141> 1999-09-14

<150> 09/229,007

<151> 1999-01-12

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<170> PatentIn Ver. 2.1

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<223> Description of Artificial Sequence:exemplary motif
of C2H2 class of zinc finger proteins (ZFP)

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<222> (2)..(3)

<223> Xaa = any amino acid

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<223> Xaa = any amino acid, may be present or absent

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<223> Xaa = any amino acid, may be present or absent

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Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

0925796-080901

Xaa Xaa His Xaa Xaa Xaa Xaa His
 20 25

<210> 2
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 <223> Description of Artificial Sequence:ZFP target site
 with two overlapping D-able subsites

<220>
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 <222> (1)..(2)
 <223> n = g, a, c or t

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 <222> (5)
 <223> n = g, a, c or t

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 <221> modified_base
 <222> (8)
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 <222> (9)
 <223> n = a, c or t; if g, then position 10 cannot be g
 or t

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 nngkngknnn

10

<210> 3
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 <223> Description of Artificial Sequence:ZFP target site
 with three overlapping D-able subsites

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0923796 08954

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nngkngkngk

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<210> 4
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<223> Description of Artificial Sequence:linker

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Asp Gly Gly Gly Ser
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Thr Gly Glu Lys Pro
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Gly Gly Arg Arg
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<223> Description of Artificial Sequence:linker

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Gly Gly Gly Gly Ser
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<223> Description of Artificial Sequence:linker

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Gly Gly Arg Arg Gly Gly Gly Ser
1 5

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Leu Arg Gln Arg Asp Gly Glu Arg Pro
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0925795-080901

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  Val Pro Gly Lys Lys Lys Gln His Ile Cys His Ile Gln Gly Cys Gly
      1              5              10              15

aaa gtt tac ggc cgc tcc gac aac ctg acc cgc cac ctg cgc tgg cac 97
Lys Val Tyr Gly Arg Ser Asp Asn Leu Thr Arg His Leu Arg Trp His
      20              25              30

acc ggc gag agg cct ttc atg tgt aca tgg tcc tac tgt ggt aaa cgc 145
Thr Gly Glu Arg Pro Phe Met Cys Thr Trp Ser Tyr Cys Gly Lys Arg
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<223> Description of Artificial Sequence:designed ZFP construct (from KpnI to BamHI) targeting 9-base pair target site in VEGF promoter

Val Pro Gly Lys Lys Lys Gln His Ile Cys His Ile Gln Gly Cys Gly
1 5 10 15

Thr Gly Glu Arg Pro Phe Met Cys Thr Trp Ser Tyr Cys Gly Lys Arg
35 40 45

Glu Lys Lys Phe Ala Cys Pro Glu Cys Pro Lys Arg Phe Met Arg Ser
65 70 75 80

Ser

<212> DNA

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25

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VEGFD2

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25

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mVEGF

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<213> Artificial Sequence

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<223> Description of Artificial Sequence:PCR primer
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gcagaaagtc catggtttcg gaggcc

26

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